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April 5, 2013

Mr. Christopher Cote, Project Officer
Remediation Division
Montana Department of Environmental Quality
1100 North Last Chance Gulch
P.O. Box 200901
Helena, MT 59620-0901

RE: First Quarter 2013 Groundwater and LNAPL Elevation Measurements and LNAPL Recovery
Results, Former Texaco Sunburst Works Refinery, Sunburst, Montana

Dear Mr. Cote:

This document summarizes work conducted by the Chevron Environmental Management Company (CEMC) during the first quarter of 2013 (January through March) at the Former Texaco Sunburst Works Refinery ("the Facility") in Sunburst, Montana, in accordance with the Montana Department of Environmental Quality (MDEQ) - approved Work Plan entitled *Addendum No. 2 to Revised Limited Scoping Investigation Work Plan, Former Texaco Sunburst Works Refinery, Sunburst, Montana*.

Thank you for your continued assistance with this project. If you have any questions or require additional information regarding this submittal, please contact me at (713) 432-2643 or Patrick Henricks, of Trihydro Corporation, at (307) 760-9447.

Sincerely,

Mark P. Stella

136-047-002

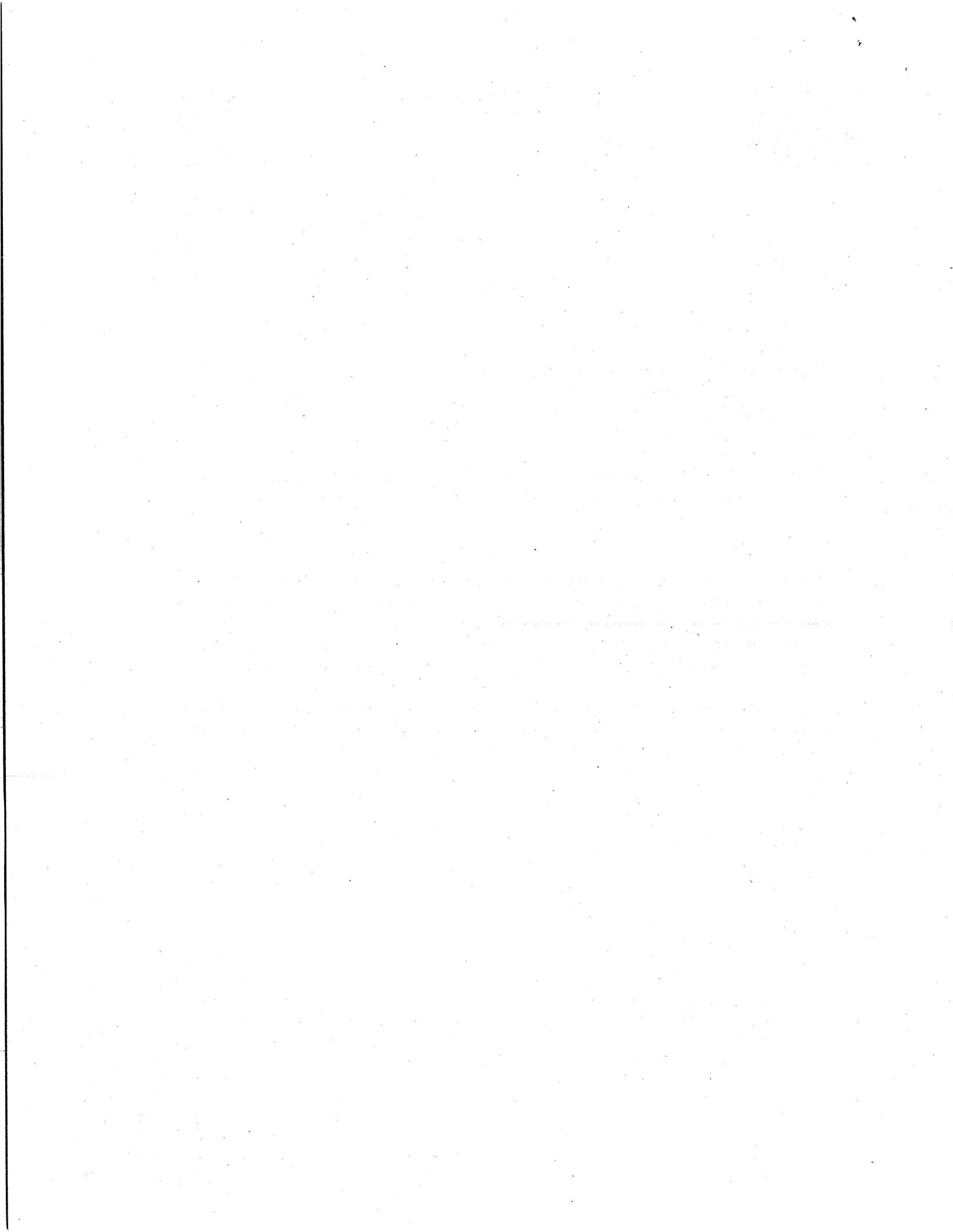
Attachments

cc: Trevor Black, Chevron EPG
Patrick Henricks, Trihydro Corporation

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Dept. of Environmental Quality,
Remediation Division



ATTACHMENT

FIRST QUARTER 2013 RECOVERY RESULTS LETTER

FLUID LEVEL MEASUREMENT RESULTS

CEMC completed the following fluid level measurement tasks (in accordance with the approved Work Plan) during the first quarter 2013 event (January through March): Determination of groundwater elevation, LNAPL presence/absence, and (if present) determination of LNAPL elevation at select locations. A measurable thickness of LNAPL was detected at twelve monitoring well locations: LSSI-7, LSSI-9, LSSI-9R, LSSI-16, LSSI-16R, PA-1, P2RI-45E, SDW-20D, SDW-24D, SDW-25D, SDW-31D, and TB10-RW. Figure 1 (attached) depicts locations at the Facility where fluid level monitoring/LNAPL recovery is currently conducted. Table 1 summarizes fluid level gauging and LNAPL recovery since January 2013. Note that only data from the current calendar year are shown in Table 1; cumulative historical data, from all locations monitored during 2013, will be presented at the end of the calendar year.

In addition to the locations listed above, LNAPL was also detected at monitoring well SDW-33S during the site-wide fluid level gauging event conducted the week of April 1, 2013. SDW-33S is a monitoring well installed by Water and Environmental Technologies located in the Town of Sunburst adjacent to 5th Street South between 2nd Avenue West and 3rd Avenue West. The presence of LNAPL (0.01 foot thickness) was visually confirmed using a disposable bailer.

LNAPL RECOVERY

In accordance with the approved Work Plan, CEMC recovered LNAPL from any well/boring where the measurable thickness exceeded 0.5 feet, and if practicable, from any well/boring where the measurable thickness of LNAPL was less than 0.5 feet. All recovered LNAPL is properly stored in steel containment drums located within secure buildings containing appropriate spill protection.

Absorbent socks are currently installed at locations LSSI-7, LSSI-9, LSSI-9R, LSSI-16, LSSI-16R, P2RI-42S, P2RI-45E, SDW-24D, SDW-25D, SDW-31D, and TB10-RW. Approximately 0.083, 0.038, 0.569, 0.003, 0.004, 0.357, 0.094, 0.077, 0.366, and 0.207 gallons of LNAPL were recovered from the absorbent socks installed LSSI-7, LSSI-9, LSSI-9R, LSSI-16, LSSI-16R, P2RI-45E, SDW-24D, SDW-25D, SDW-31D, and TB10-RW, respectively, during the first quarter of 2013. No LNAPL was detected or recovered from the absorbent sock installed at monitoring well P2RI-42S.

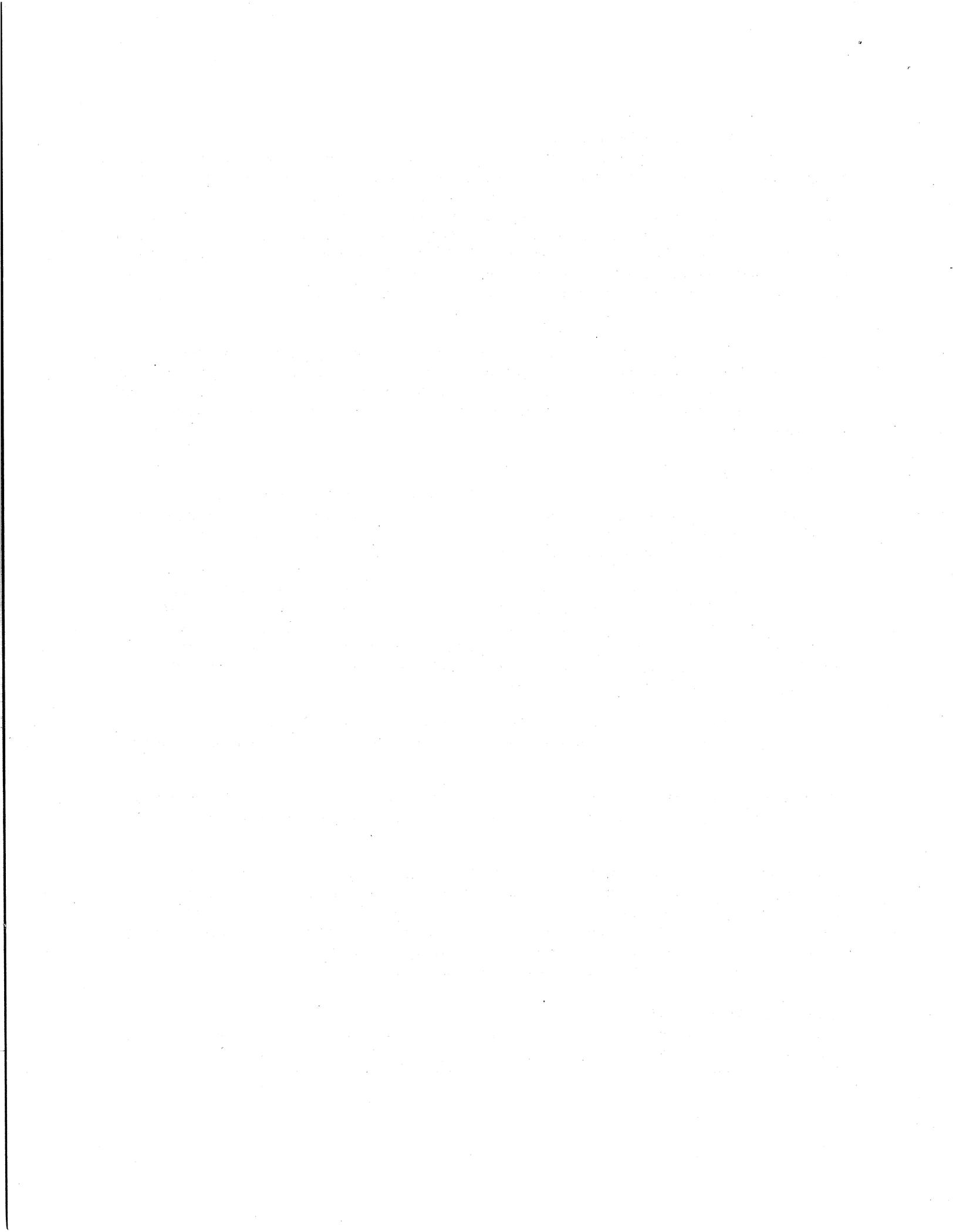
A passive hydrocarbon skimmer is currently installed at monitoring well PA-1. CEMC recovered approximately 0.246 gallons of LNAPL from the passive skimmer unit installed at PA-1 during the first quarter of 2013.

LNAPL recovery from monitoring well SDW-20D was completed using the *Geotech 1.66 Reclaimer*, as detailed in the Work Plan. Approximately 24.061 gallons of LNAPL were recovered from monitoring well SDW-20D during the first quarter of 2013.

The results of all LNAPL recovery activities completed at the Facility during the first quarter of 2013 are summarized in Table 1. Figures 2 through 9 provide a summary of LNAPL thickness, and the cumulative amount of LNAPL recovered to date for locations LSSI-9, LSSI-9R, LSSI-16, LSSI-16R, PA-1, SDW-20D, SDW-24D, and SDW-31D. Figure 10 provides a Facility-wide historical LNAPL recovery summary based on each month's LNAPL recovery total since December 2007. Facility-wide, CEMC has recovered approximately 898 gallons of LNAPL (with some ancillary groundwater) since December 2007.

SCHEDULE AND REPORTING

CEMC is tentatively scheduled to conduct the next fluid level measurement/LNAPL recovery event during the week of April 15, 2013. CEMC will inform MDEQ in writing (via email or letter correspondence) of any rescheduling of monitoring events, if necessary. The next recovery results report will be submitted in July of 2013.



TABLE

TABLE 1. FLUID LEVEL MEASUREMENTS AND LNAPL PRESENCE AND RECOVERY DATA, FIRST QUARTER 2013

TABLE 1. FLUID LEVEL MEASUREMENTS AND LNAPL PRESENCE AND RECOVERY DATA
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Date	Measuring Point Elevation (ft. msl)	Depth to Product (ft. bmp)	Depth to Water (ft. bmp)	Product Thickness (ft)	Product Elevation (ft. msl)	Water Table Elevation (ft. msl)	Corrected Water Table Elevation (ft. msl)	Total Depth (ft. bmp)	Notes
LSSI-7	01/08/13	3453.23	30.00	30.01	0.01	3423.23	3423.22	3423.23	NM	Approximately 0.048 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3453.23	ND	29.79	-	-	3423.44	-	NM	Approximately 0.029 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3453.23	ND	29.73	-	-	3423.50	-	38.80	Approximately 0.007 gallons of LNAPL recovered from absorbent sock.
LSSI-9	01/08/13	3452.38	44.15	ND	0.17	3408.23	-	-	44.32	Approximately 0.004 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3452.38	44.26	ND	0.05	3408.12	-	-	44.31	Approximately 0.032 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3452.38	44.20	44.27	0.07	3408.18	3408.11	3408.17	44.34	Approximately 0.003 gallons of LNAPL recovered from absorbent sock.
LSSI-9R	01/08/13	3453.09	37.98	ND	0.09	3415.11	-	-	38.07	Approximately 0.213 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3453.09	37.99	ND	0.07	3415.10	-	-	38.06	Approximately 0.225 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3453.09	37.84	ND	0.20	3415.25	-	-	38.04	Approximately 0.132 gallons of LNAPL recovered from absorbent sock.
LSSI-16	01/08/13	3447.50	ND	30.11	-	-	3417.39	-	NM	No LNAPL detected, none present in absorbent sock.
	02/27/13	3447.50	ND	30.13	-	-	3417.37	-	NM	Approximately 0.003 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3447.50	30.20	30.22	0.02	3417.30	3417.28	3417.30	30.48	Approximately 0.001 gallons of LNAPL recovered from absorbent sock.
LSSI-16R	01/08/13	3448.60	ND	30.87	-	-	3417.73	-	NM	No LNAPL detected, none present in absorbent sock.
	02/27/13	3448.60	ND	31.30	-	-	3417.30	-	NM	Approximately 0.004 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3448.60	31.19	31.21	0.02	3417.41	3417.39	3417.40	33.03	Approximately 0.001 gallons of LNAPL recovered from absorbent sock.
PA-1	01/08/13	3363.13	21.75	21.97	0.22	3341.38	3341.16	3341.34	NM	Approximately 0.088 gallons of LNAPL recovered from passive skimmer unit.
	02/27/13	3363.13	21.11	21.22	0.11	3342.02	3341.91	3342.00	NM	Approximately 0.153 gallons of LNAPL recovered from passive skimmer unit.
	03/25/13	3363.13	21.27	21.32	0.05	3341.86	3341.81	3341.85	NM	Approximately 0.004 gallons of LNAPL recovered from passive skimmer unit.
P2R1-42S	01/08/13	3450.23	ND	17.35	-	-	3432.88	-	NM	No LNAPL detected; no visible indication on interface probe.
	02/27/13	3450.23	ND	17.88	-	-	3432.35	-	NM	No LNAPL detected; no visible indication on interface probe.
	03/25/13	3450.23	ND	18.07	-	-	3432.16	-	23.21	No LNAPL detected; no visible indication on interface probe.
P2R1-45E	01/28/13	3443.80	11.25	11.48	0.23	3432.55	3432.32	3432.51	NM	Approximately 0.285 gallons of LNAPL recovered from passive skimmer unit.
	02/27/13	3443.80	11.90	12.11	0.21	3431.90	3431.69	3431.86	NM	Approximately 0.070 gallons of LNAPL recovered from passive skimmer unit/disposable bailer.
	03/25/13	3443.80	11.92	12.01	0.09	3431.88	3431.79	3431.87	25.00	Approximately 0.001 gallons of LNAPL recovered from absorbent sock.
SDW-5D	01/08/13	3449.86	ND	28.07	-	-	3421.79	-	NM	No LNAPL detected; no visible indication on interface probe.
	02/27/13	3449.86	ND	21.66	-	-	3428.20	-	NM	No LNAPL detected; no visible indication on interface probe.
	03/25/13	3449.86	ND	27.77	-	-	3422.09	-	109.95	No LNAPL detected; no visible indication on interface probe.
SDW-20D	01/15/13	3455.33	149.86	ND	3.31	3305.47	-	-	153.17	Approximately 4.656 gallons of LNAPL recovered from pneumatic pump system.
	02/27/13	3455.33	NM	NM	-	-	-	-	NM	Approximately 11.782 gallons of LNAPL recovered from pneumatic pump system.
	03/25/13	3455.33	NM	NM	-	-	-	-	NM	Approximately 7.622 gallons of LNAPL recovered from pneumatic pump system.
SDW-21D	01/08/13	3446.46	ND	26.28	-	-	3420.18	-	NM	No LNAPL detected; no visible indication on interface probe.
	02/27/13	3446.46	ND	26.86	-	-	3419.60	-	NM	No LNAPL detected; no visible indication on interface probe.
	03/25/13	3446.46	ND	22.10	-	-	3424.36	-	NM	No LNAPL detected; no visible indication on interface probe.
SDW-24D	01/08/13	3448.22	123.61	ND	0.11	3324.61	-	-	123.72	Approximately 0.029 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3448.22	123.36	ND	0.27	3324.86	-	-	123.63	Approximately 0.045 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3448.22	123.36	ND	0.29	3324.86	-	-	123.65	Approximately 0.020 gallons of LNAPL recovered from absorbent sock.

TABLE 1. FLUID LEVEL MEASUREMENTS AND LNAPL PRESENCE AND RECOVERY DATA
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA

Location	Date	Measuring Point Elevation (ft msl)	Depth to Product (ft bmp)	Depth to Water (ft bmp)	Product Thickness (ft)	Product Elevation (ft msl)	Water Table Elevation (ft msl)	Corrected Water Table Elevation (ft msl)	Total Depth (ft bmp)	Notes
SDW-25D	01/28/13	3442.26	ND	117.87	—	—	3324.39	—	NM	Approximately 0.042 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3442.26	117.62	117.65	0.03	3324.64	3324.61	3324.63	NM	Approximately 0.021 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3442.26	ND	117.54	—	—	3324.72	—	120.20	Approximately 0.013 gallons of LNAPL recovered from absorbent sock.
SDW-31D	01/08/13	3438.33	114.11	ND	0.33	3324.22	—	—	114.44	Approximately 0.240 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3438.33	113.71	ND	0.74	3324.62	—	—	114.45	Approximately 0.099 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3438.33	113.64	ND	0.83	3324.69	—	—	114.47	Approximately 0.026 gallons of LNAPL recovered from absorbent sock.
TB10-RW	01/08/13	3451.24	20.22	ND	0.10	3431.02	—	—	20.32	Approximately 0.110 gallons of LNAPL recovered from absorbent sock.
	02/27/13	3451.24	20.22	ND	0.08	3431.02	—	—	20.30	Approximately 0.078 gallons of LNAPL recovered from absorbent sock.
	03/25/13	3451.24	20.21	ND	0.04	3431.03	—	—	20.25	Approximately 0.020 gallons of LNAPL recovered from absorbent sock.

Abbreviations and Acronyms:

- ft - feet
- ft bmp - feet below measuring point
- ft msl - feet above mean sea level
- LNAPL - light non-aqueous phase liquid
- ND - not detected
- NM - not measured
- TD - total depth

Note:

"Notes" section refers to cumulative amount recovered during that month (i.e. "01/08/13 ... Approximately 4,656 gallons..." implies that 4,656 gallons were recovered during the month of January).

FIGURES

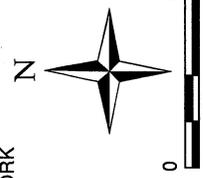
- FIGURE 1. FLUID LEVEL GAUGING LOCATIONS**
- FIGURE 2. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL LSSI-9**
- FIGURE 3. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL LSSI-9R**
- FIGURE 4. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL LSSI-16**
- FIGURE 5. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL LSSI-16R**
- FIGURE 6. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL PA-1**
- FIGURE 7. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL SDW-20D**
- FIGURE 8. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL SDW-24D**
- FIGURE 9. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, WELL SDW-31D**
- FIGURE 10. HISTORICAL LNAPL RECOVERY SUMMARY**



FIGURE 1	
FLUID LEVEL GAUGING LOCATIONS	
FORMER TEXACO SUNBURST WORKS REFINERY SUNBURST, MONTANA	
 1252 Commerce Drive Laramie, WY 82070 www.trihydro.com (P) 307.7745.7474 (F) 307.7745.7729	
Drawn By: JH	Checked By: JH
Scale: 1" = 600'	Date: 2/8/13
File: 20130208_NAPL_Locs.mxd	

EXPLANATION

- ⊕ MONITORING WELL - PART OF CURRENT RECOVERY NETWORK
- ▭ CHEVRON PROPERTY BOUNDARY



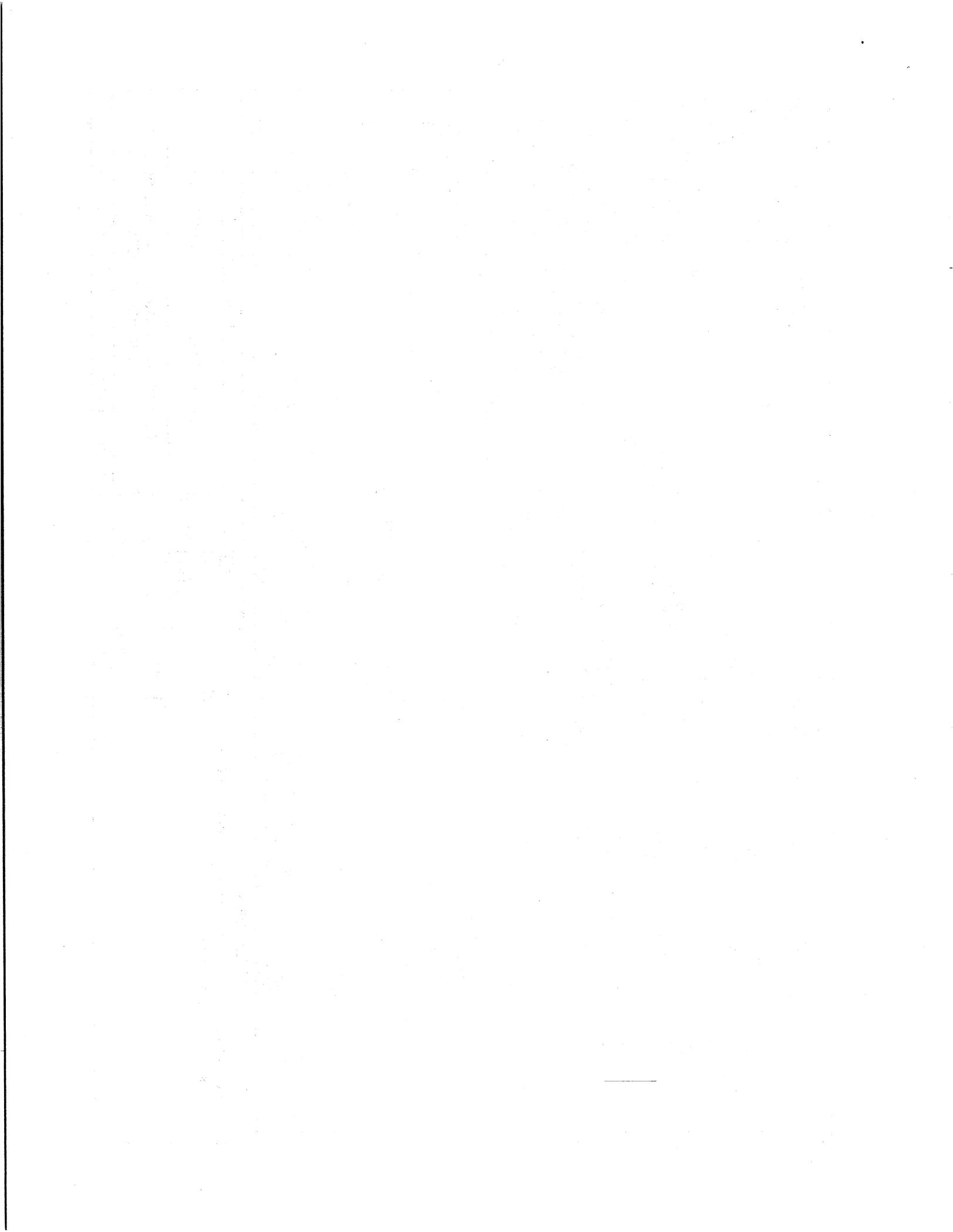
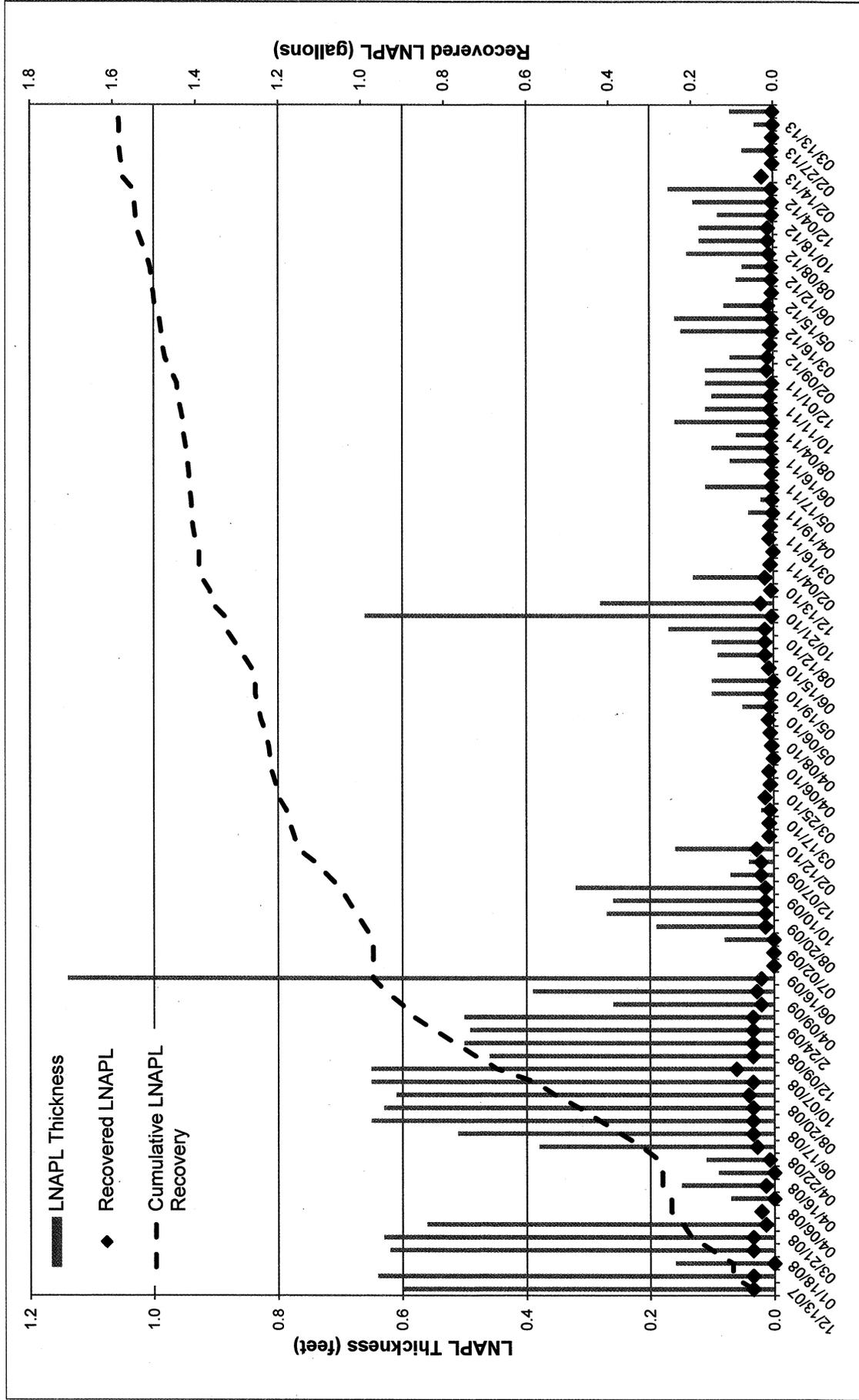


FIGURE 2. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, LSSI-9
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



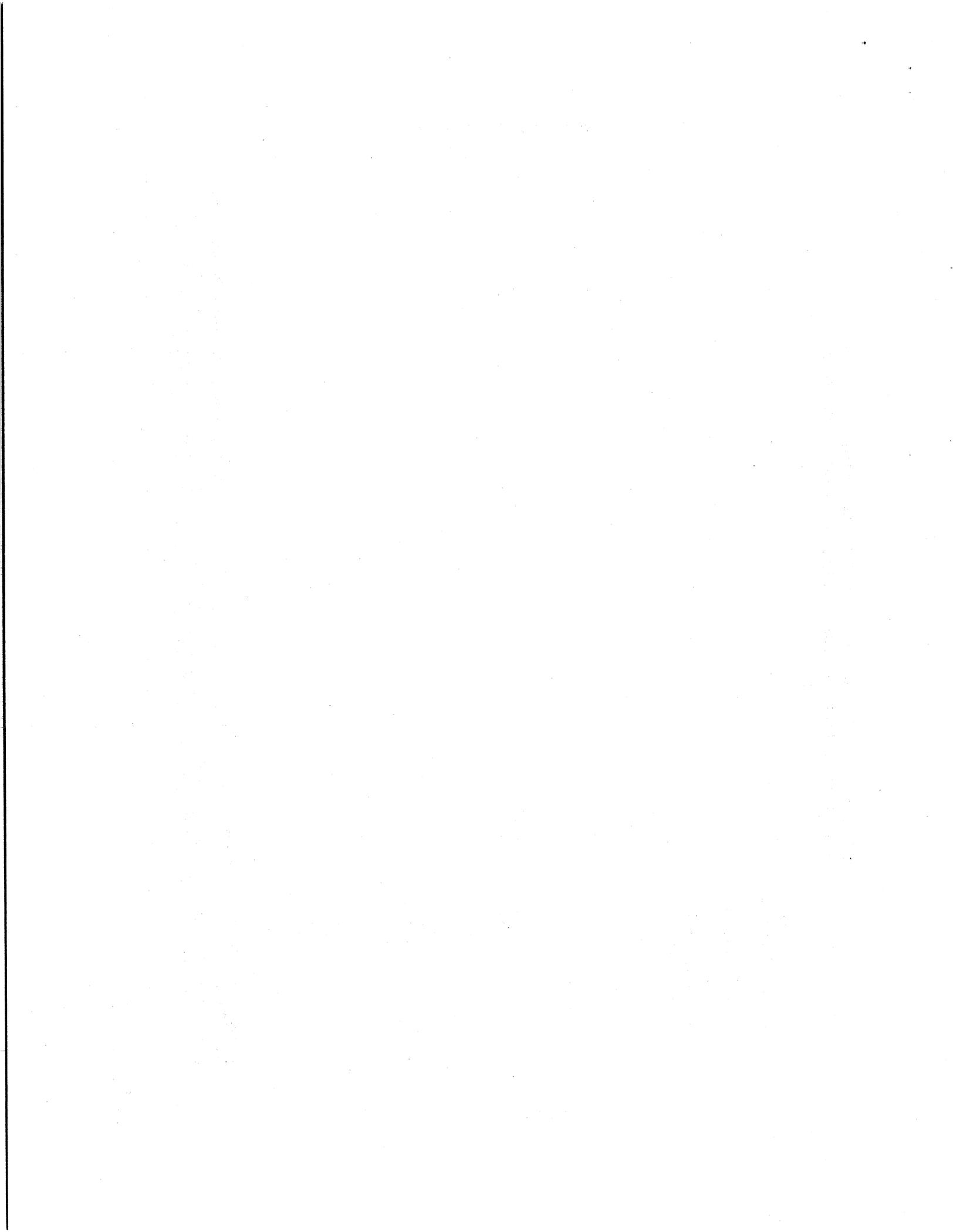
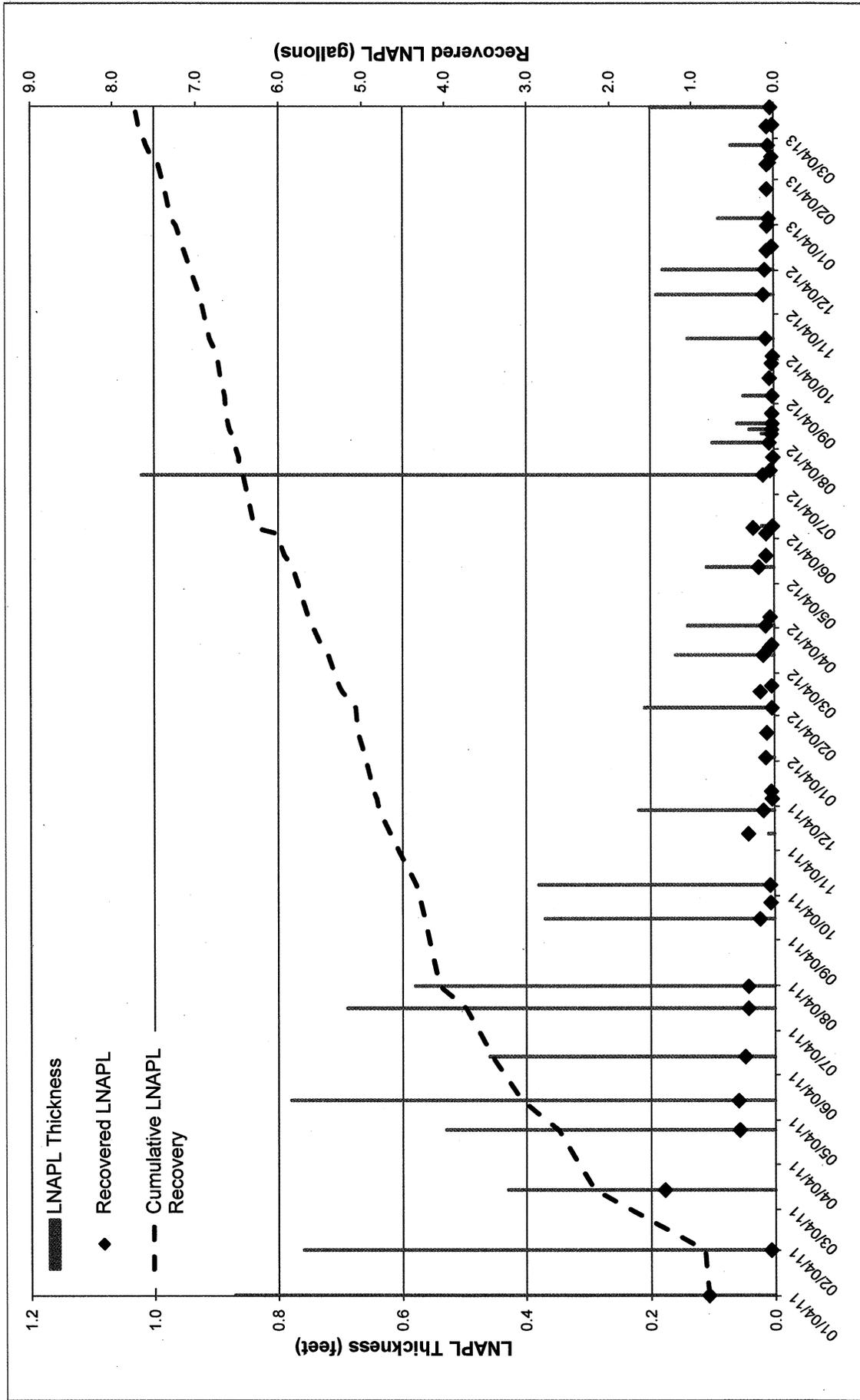


FIGURE 3. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, LSSI-9R
 FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



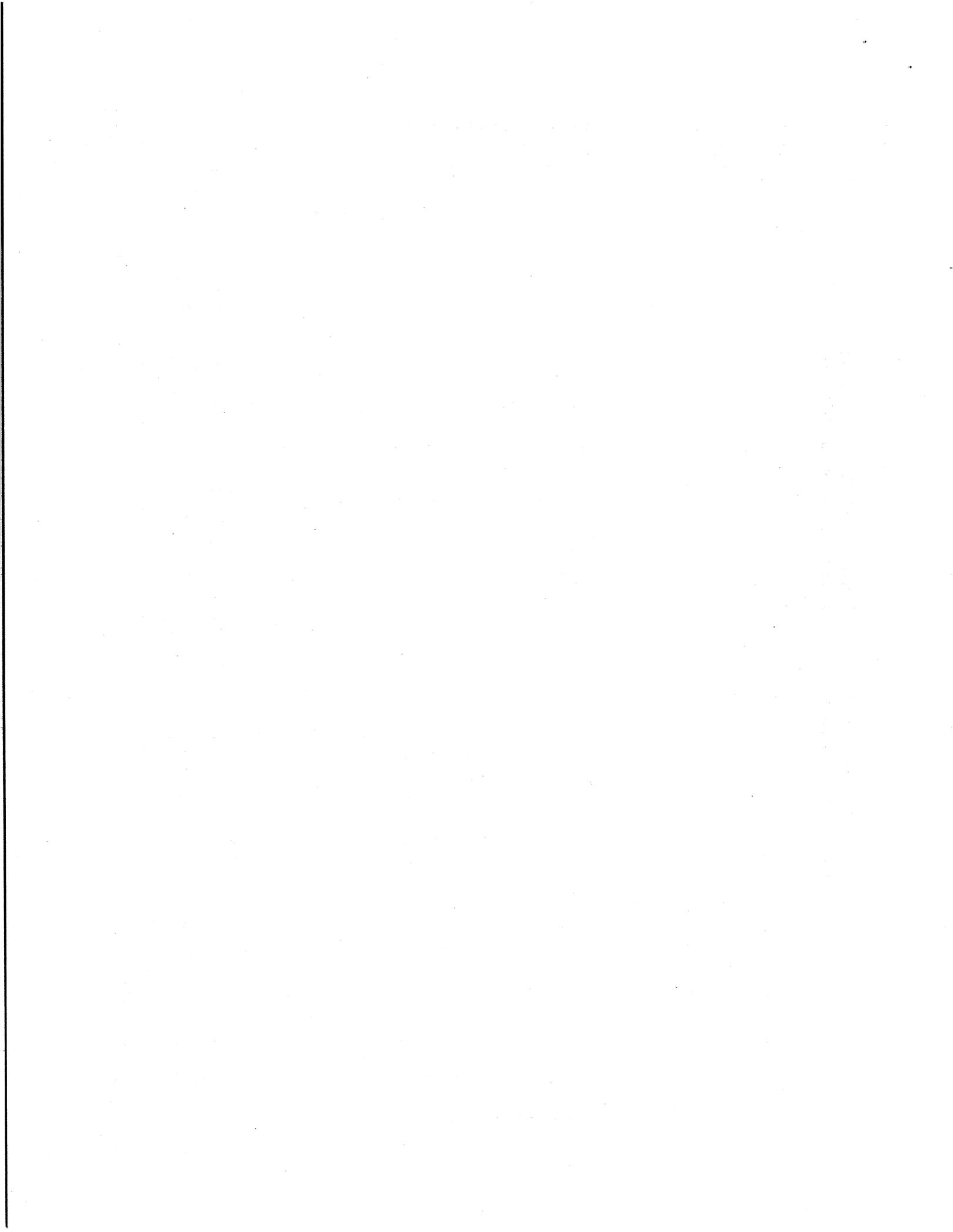
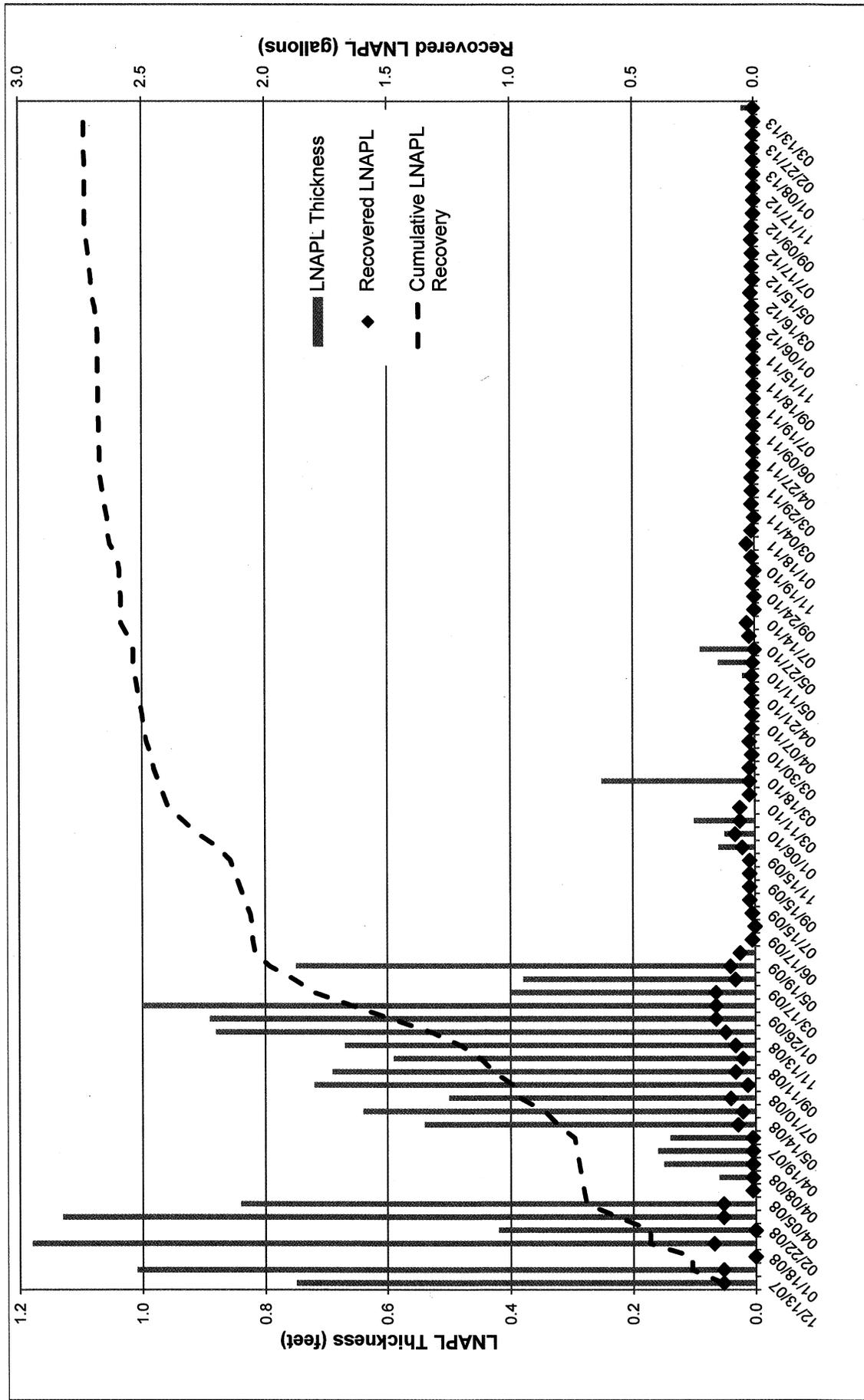


FIGURE 4. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, LSSI-16
 FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



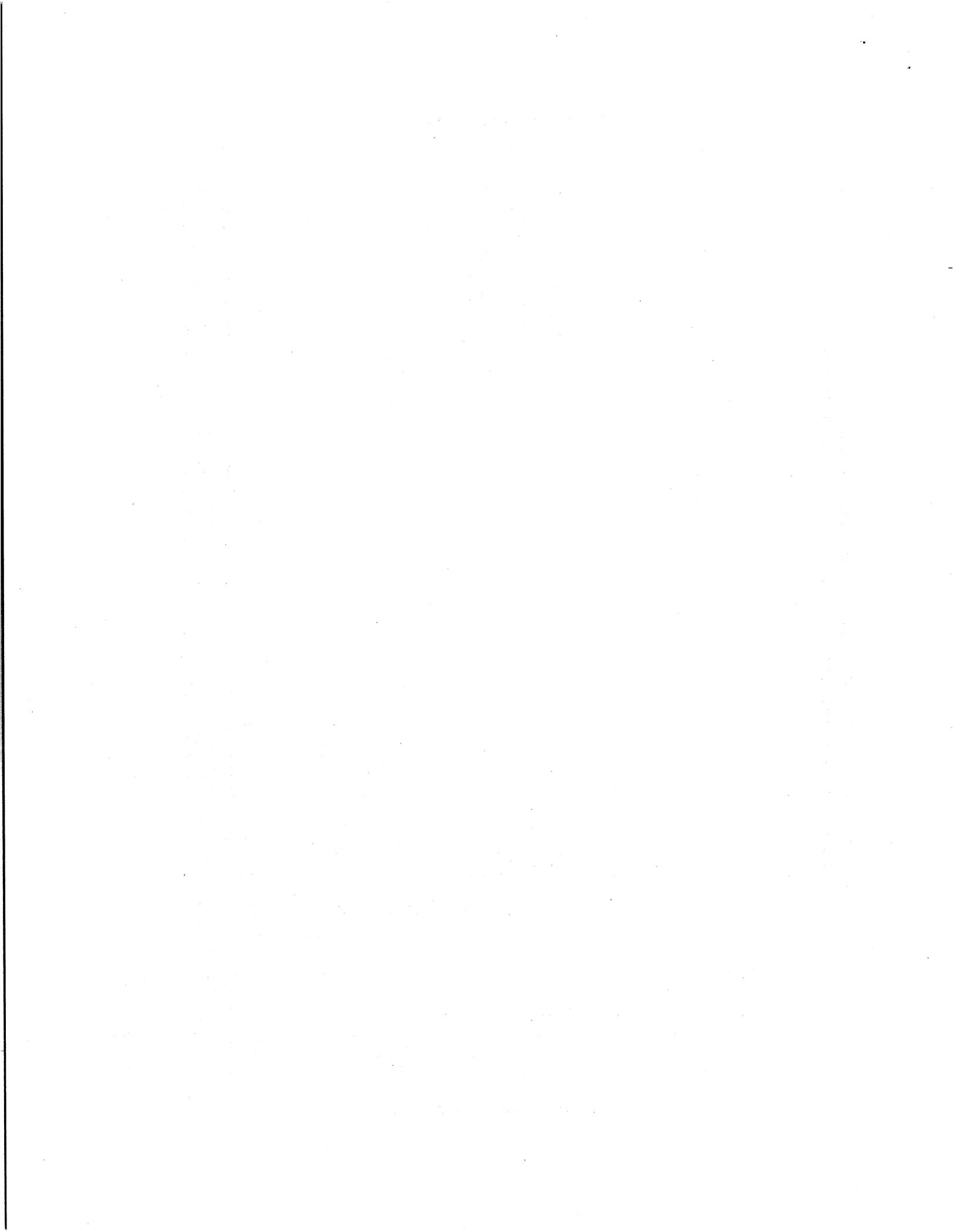
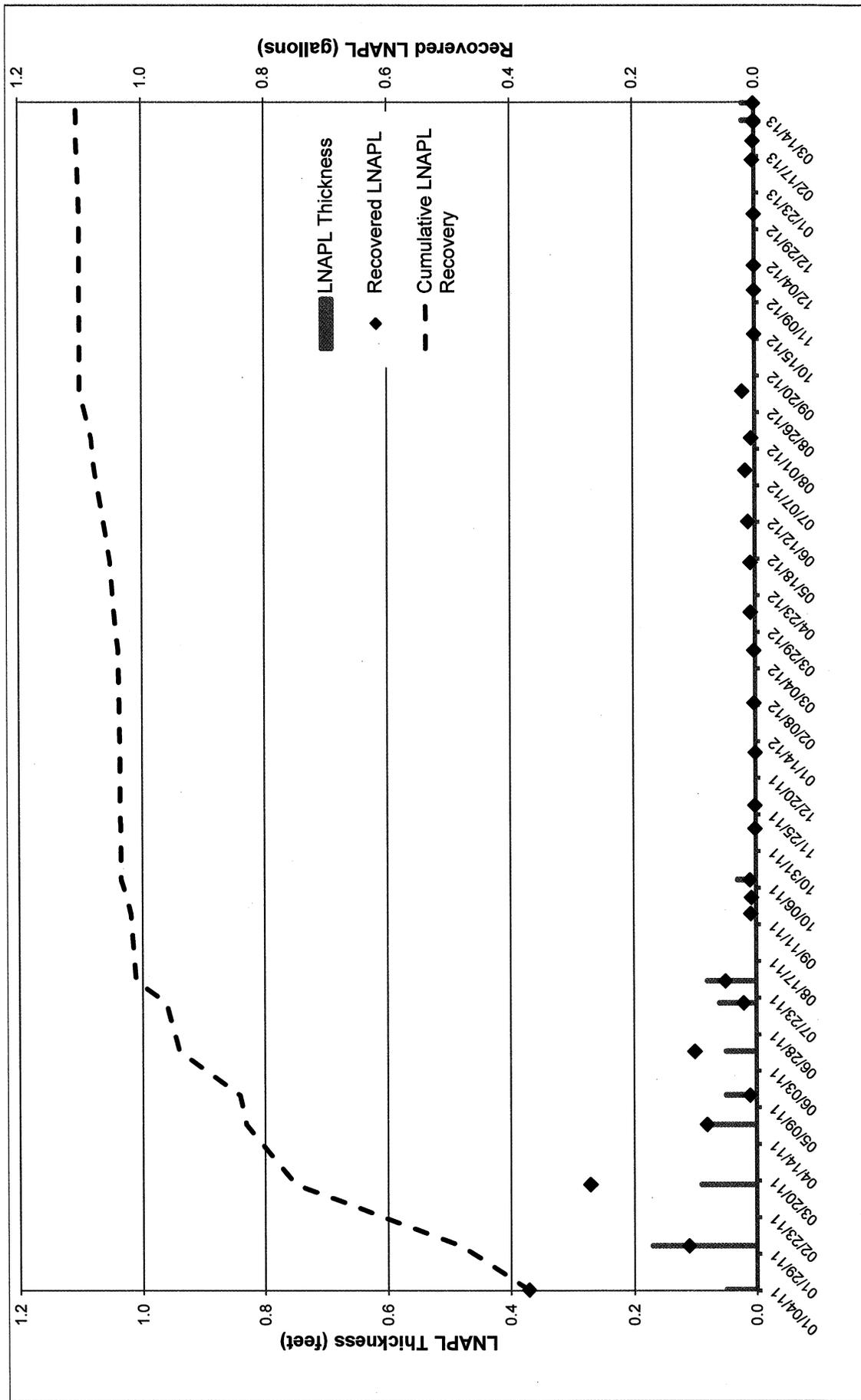
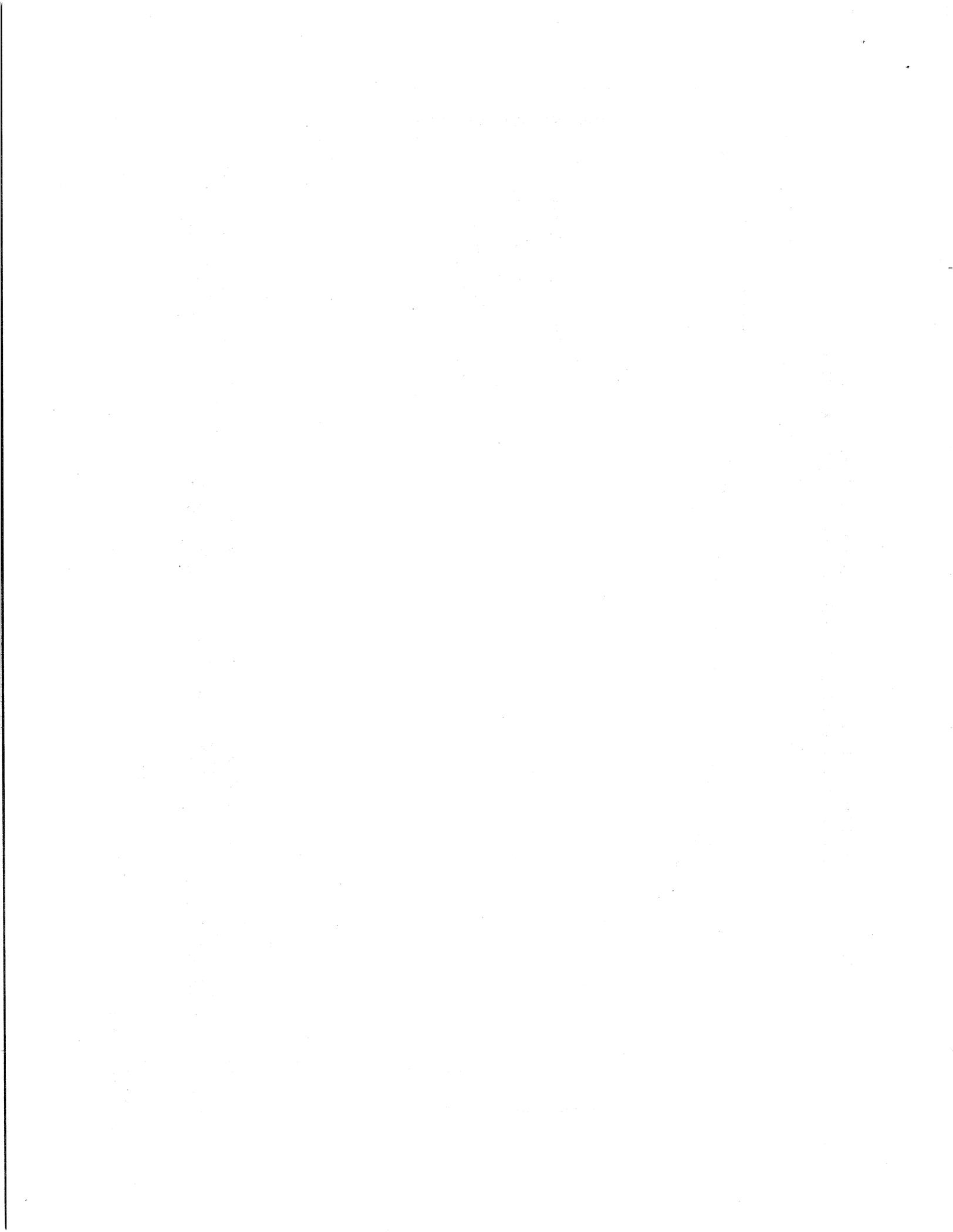
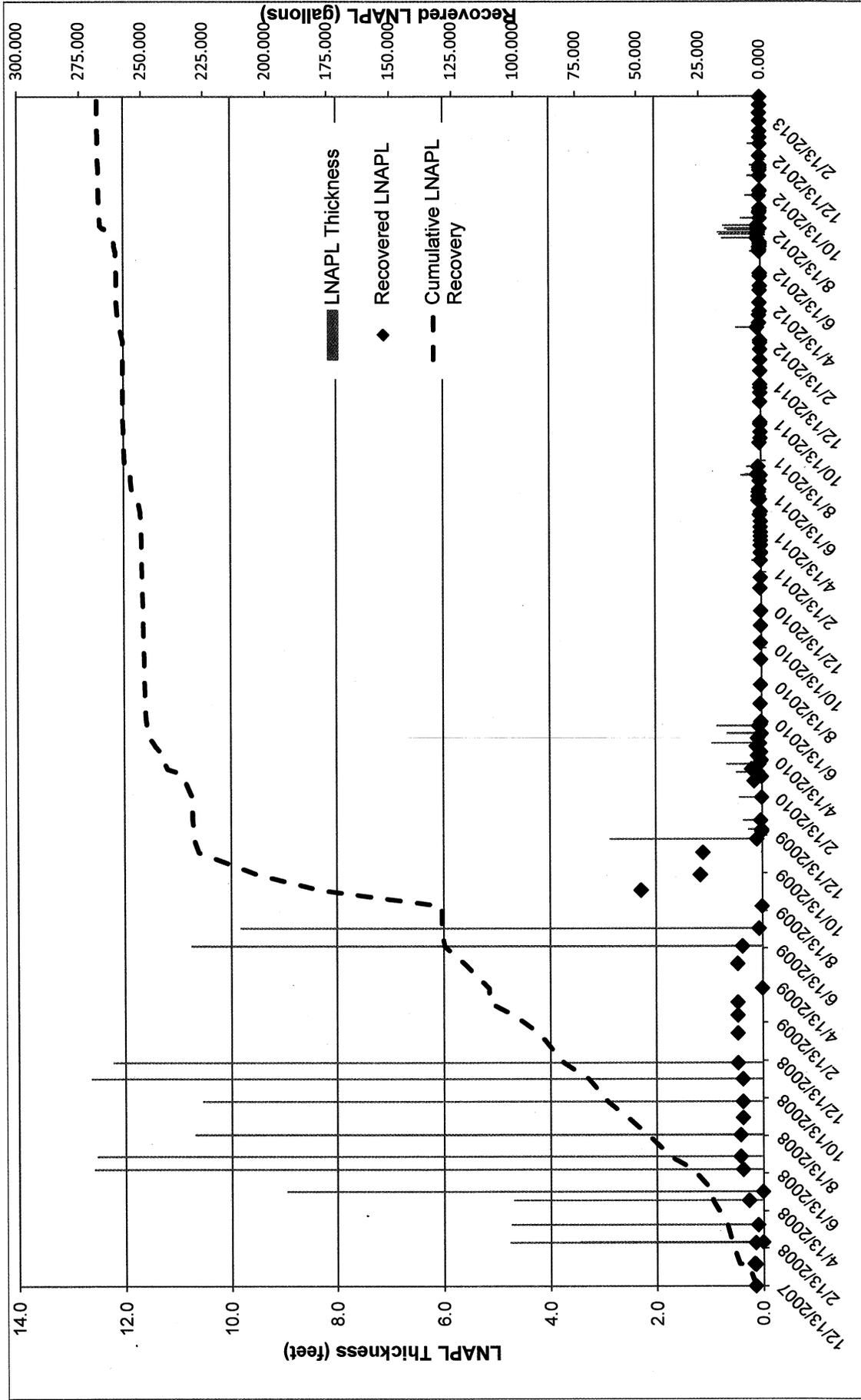


FIGURE 5. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, LSSI-16R
 FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA





**FIGURE 6. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, PA-1
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA**



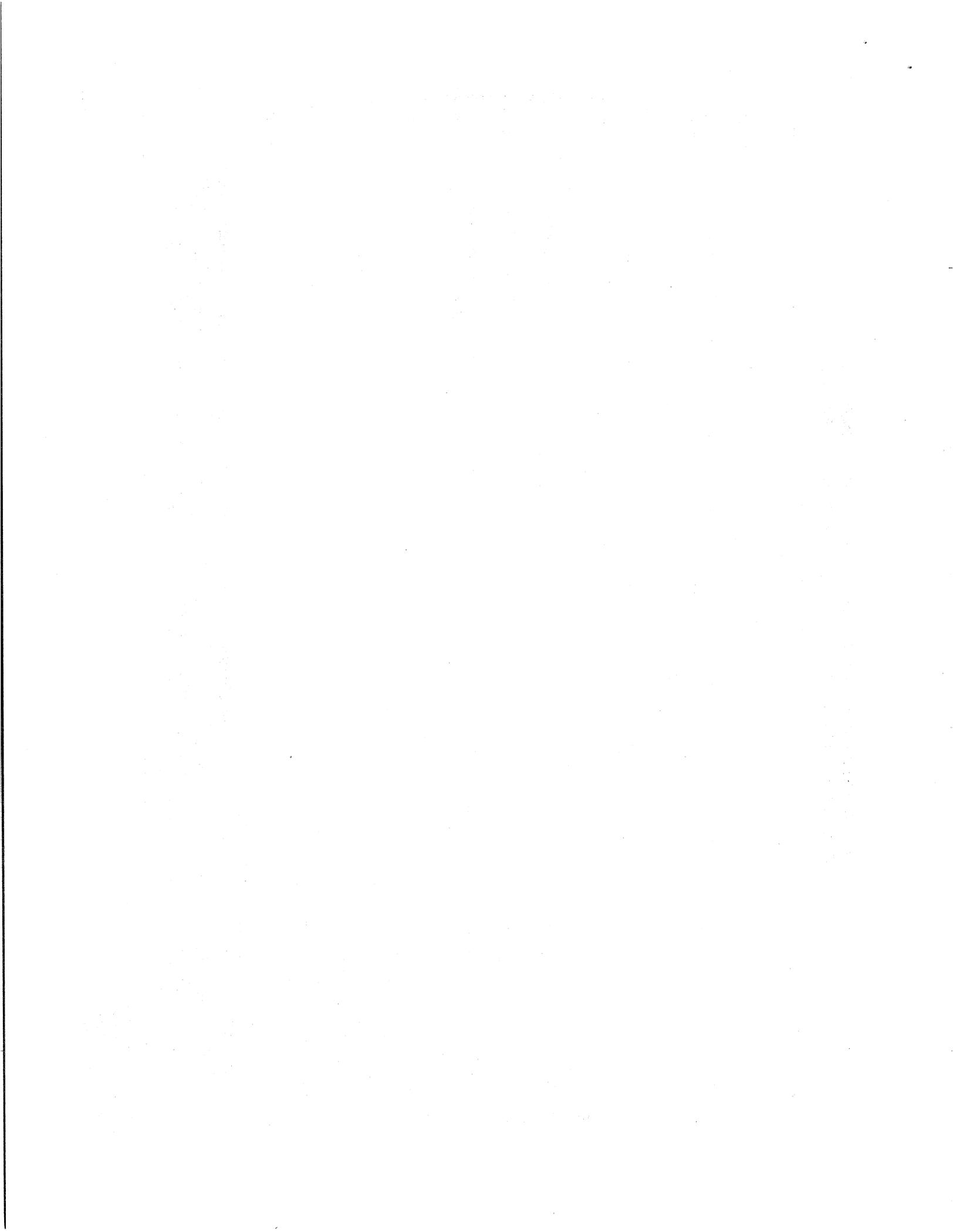
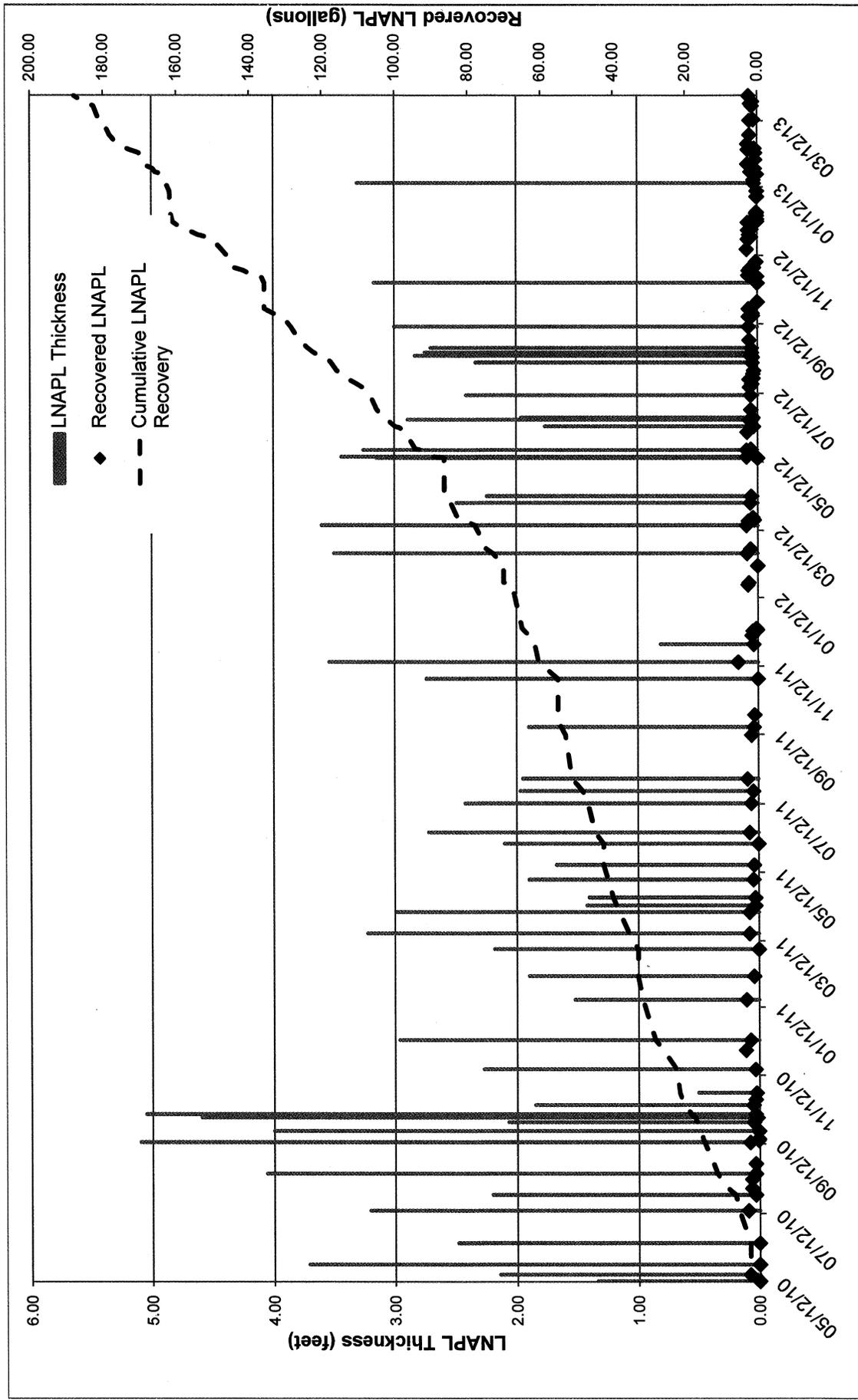
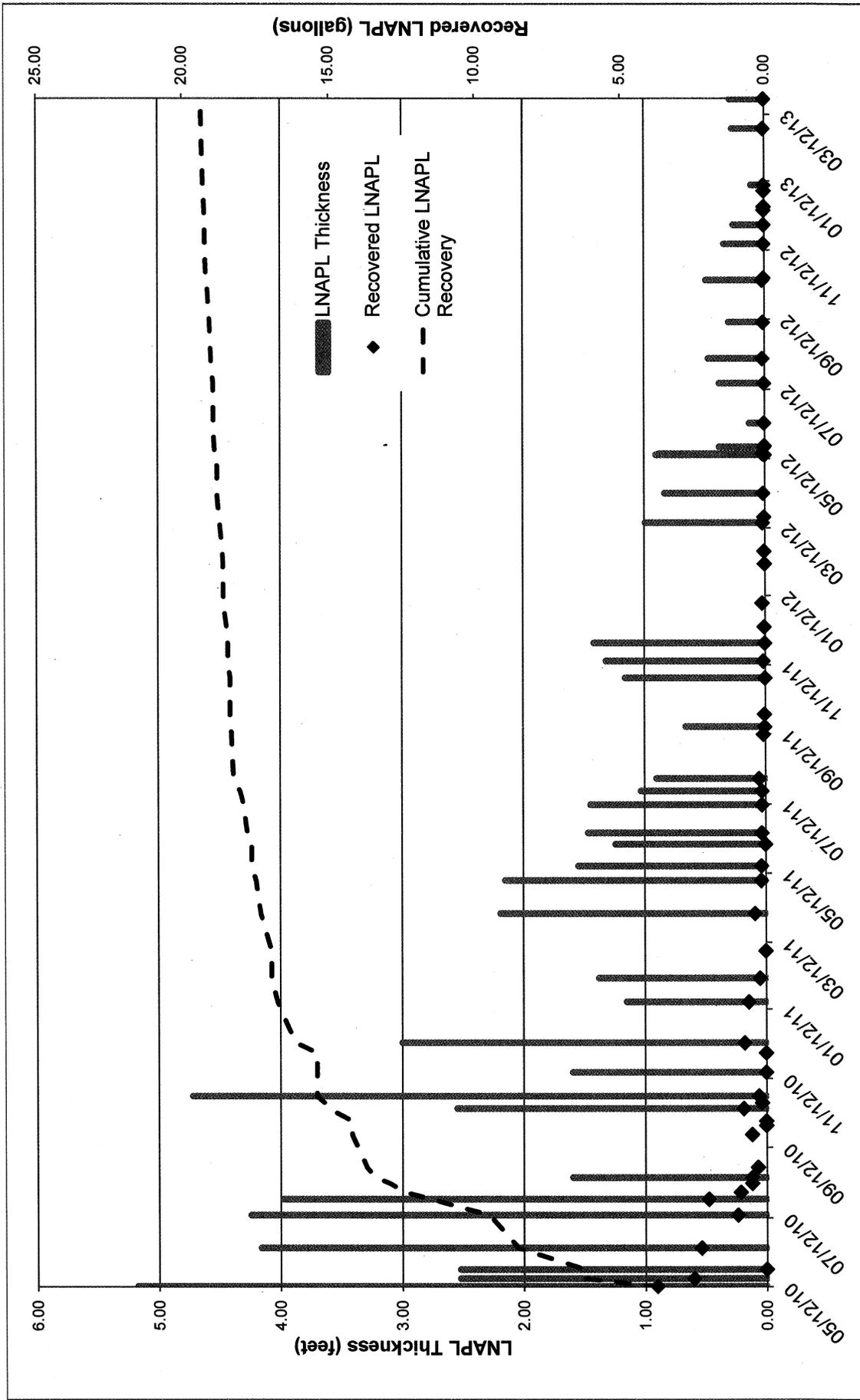


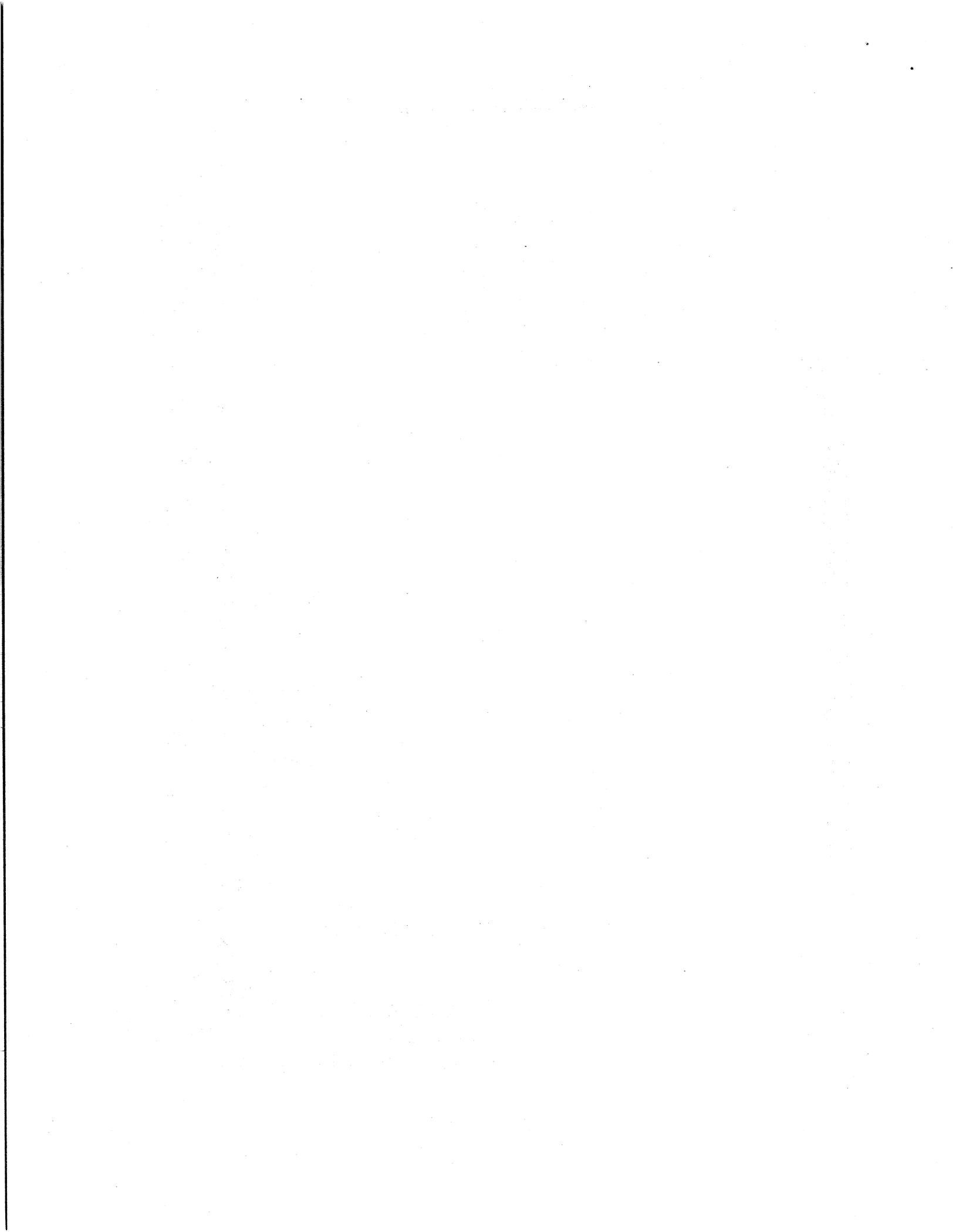
FIGURE 7. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, SDW-20D
 FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA



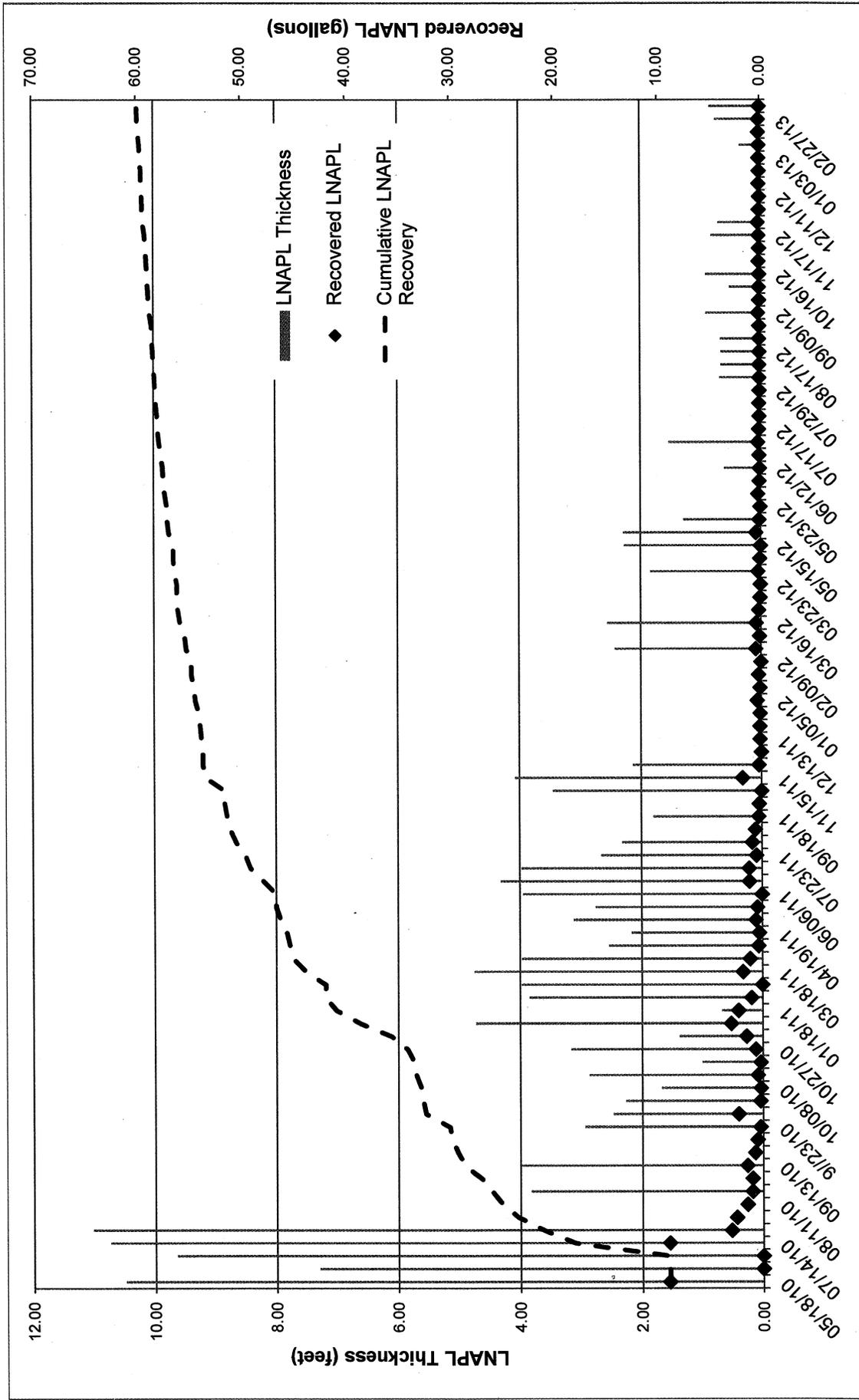


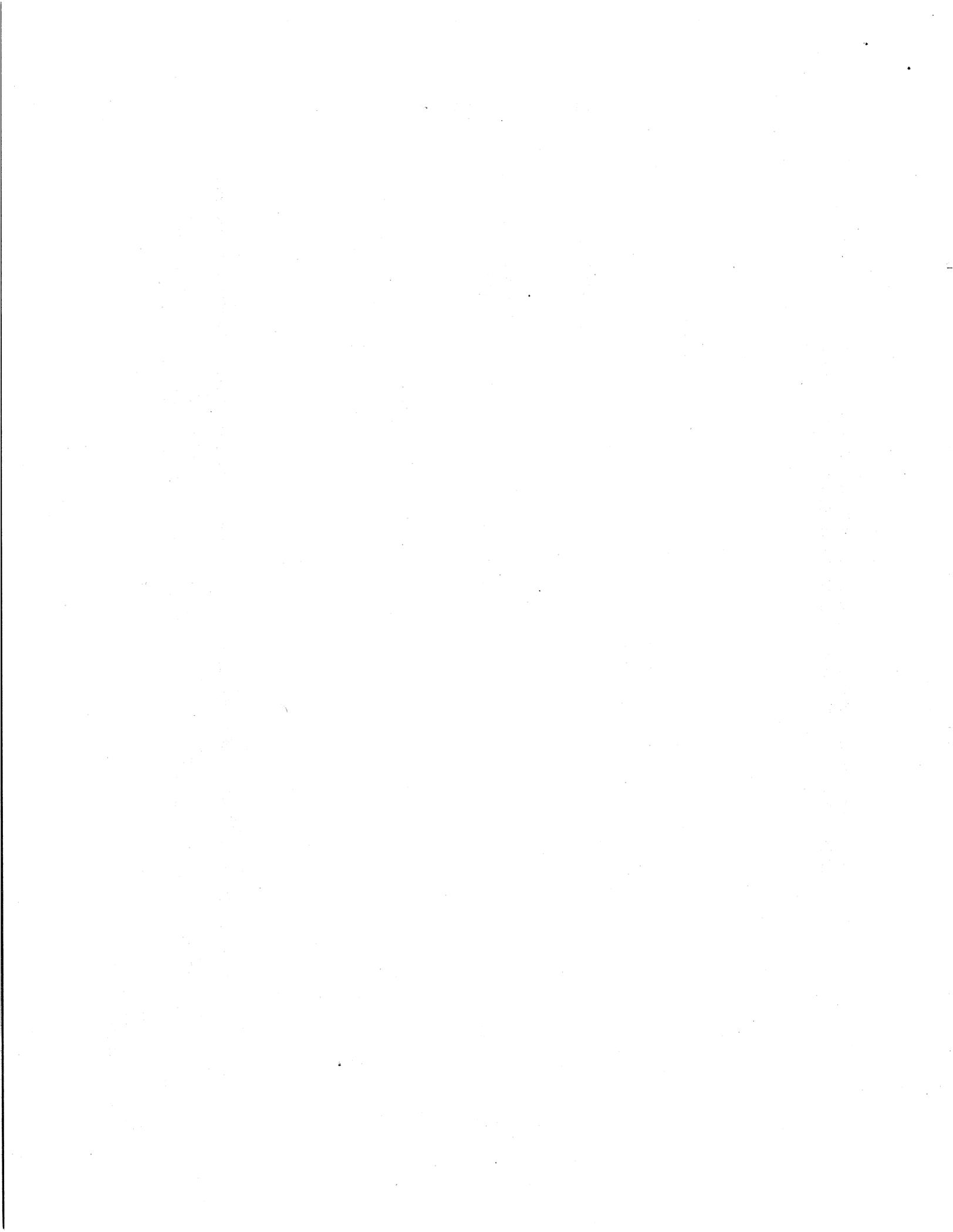
**FIGURE 8. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, SDW-24D
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA**





**FIGURE 9. RECOVERED LNAPL AND LNAPL THICKNESS SUMMARY, SDW-31D
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA**





**FIGURE 10. HISTORICAL LNAPL RECOVERY SUMMARY
FORMER TEXACO SUNBURST WORKS REFINERY, SUNBURST, MONTANA**

